

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David W. JOHNSON *et al.*

Application No. 10/698,424

Group Art Unit: 1638

Filed: November 3, 2003

Examiner: Keith O Neal Robinson

For: Alfalfa Plants Having Improved
Standability and/or Fast Recovery After Harvest
and Methods for Producing Same

Commissioner of Patents and Trademarks
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Randolph Building
401 Dulany Street
Alexandria, VA 22314

DECLARATION UNDER 37 C.F.R. § 1.132

I, Jonathan M. Reich, Ph.D., declare as follows:

1. Cal/West Seeds is the assignor of the above-referenced U.S. Patent Application (“the ‘424 application”). I am the Executive Vice President - Research and Development for Cal/West Seeds.

2. I am a named co-inventor of the ‘424 application. I am familiar with the specification, the pending claims and the prosecution file history of the ‘424 application.

3. I have read and understand the Non-Final Office Action dated June 12, 2007. This Office Action includes a rejection of claims 2-4 and 6-19 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Cluff *et al.* (U.S. Patent No. 6,143,951), issued November 7, 2000. The Office Action at paragraph no. 10, pages

8-9, alleges that “ Cluff et al teach a *Medicago sativa* alfalfa line, WL-C290, that has very fast recovery after harvest and excellent standability under sprinkler irrigation (see column 17, lines 37-38).”

4. A standard testing protocol for determining lodging resistance (“Standability Expression (Lodging Resistance”) (Exhibit A) was developed through a peer review process by the North American Alfalfa Improvement Conference (“NAAIC”). The NAAIC membership is comprised of alfalfa researchers from the government (USDA-ARS), public universities, and the private sector. David Johnson, a co-inventor of the ‘424 application, is senior author and a developer of this standard testing protocol.

5. I managed an alfalfa yield trial at Woodland, California which was harvested on a normal schedule throughout 2007 until the 5th harvest. Following the 4th harvest taken on June 20, 2007 typical management was imposed through the normal 28 day harvest interval except as follows: on July 12, 2007 approximately 5 cm of water was applied by overhead sprinkler irrigation. This irrigation was applied to promote lodging and to provide an environment where differential expression of standability (lodging resistance/tolerance) would be expressed. On July 13, 2007 every plot was rated for percentage (%) erect stems >45° according to the NAAIC standard testing protocol for Standability Expression (Lodging Resistance).

6. Averages and measures of statistical significance are summarized in the table below for the unadjusted data (“Percentage Resistance”) and with adjustment (“Adjusted Percentage Resistance”) to the lodging resistant variety ‘CW 95026’ at its long term average of 62%. ‘CW 95026’ is one of the exemplary varieties of the ‘424 application. The Standability Expression (Lodging Resistance) test establishes that alfalfa varieties with adjusted % resistance in the range of 0-30% be characterized as “susceptible” (Exhibit A). The data provided below

clearly shows that the alfalfa variety 'WL-C290' is susceptible to lodging under sprinkler irrigation.

Summary % Erect Stems (>45°)		% Erect Stems (>45°) Percentage Resistance	% Erect Stems (>45°) Adjusted Percentage Resistance
Trial	Test Entry		
05CAWD FD 4-6	'CUF 101'	65.00	44.78
05CAWD FD 7-9	'CUF 101'	70.00	48.22
05CAWD FD 4-6	'CW 95026'	90.00	62.00*
05CAWD FD 7-9	'WL 625'	10.00	6.89
05CAWD FD 7-9	'WL 711 WF' = 'WL-C290'	40.00	27.56
	Grand Mean	55.00	37.89
	LSD (0.05)	12.65	8.71
	C.V. (%)	16.26	16.26
	R2	0.94	0.94

* 'CW 95026' adjusted to 62% erect stems as approved by Association of Official Seed Certifying Agencies National Alfalfa Variety Review Board of January 2007.

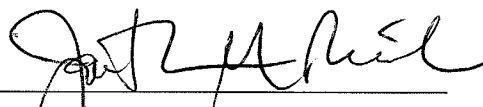
7. This test was not considered a severe test to characterize lodging resistance. Nonetheless, the July 12 irrigation created a lodging differential and statistically significant differences between varieties in standability were clearly expressed.

8. Attached to this Declaration is the Association of Official Seed Certifying Agencies ("AOSCA") summary page for the original certification of the alfalfa variety 'C290' (Exhibit B). The 'C290' alfalfa variety described in Exhibit B is the same one as the 'WL-C290' alfalfa variety disclosed and claimed in Cluff *et al.* and discussed in this Declaration. Also attached to this Declaration is the AOSCA summary page for the amendment for 'WL-C290' when it was renamed as 'WL 711 WF' (Exhibit C). The breeding history for 'WL-C290' as described in these documents does not reference either selection for standability or any measure of standability and/or lodging resistance.

9. I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Respectfully submitted,

Date: 12-10-07

By: 
Jonathan M. Reich